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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,549	03/17/2004	Akitaka Shimizu	040894-7012	3487

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EXAMINER
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ORTIZ CRIADO, JORGE L

ART UNIT	PAPER NUMBER
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2627

DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/801,549	<b>Applicant(s)</b> SHIMIZU, AKITAKA	
	<b>Examiner</b> Jorge L. Ortiz-Criado	<b>Art Unit</b> 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,3,5,6,8,9,11 and 12 is/are rejected.
- 7) ☒ Claim(s) 1,4,7,10 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07/06/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 4, 7, 10 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the two adjacent points" in lines 37 and 38.

Claims 4 and 10 recites the limitation "the two adjacent points" in lines 8 and 9 of the claims. Claims 7 and 13 fall together accordingly.

There is insufficient antecedent basis for this limitation in the claims.

### ***Double Patenting***

Applicant is advised that should claim 1 be found allowable, claim 7 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3, 5-6, 8-9 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohmi U.S. Patent No. 6,041,030 in combination with Park U.S. Patent No. 6,842,414 and further in view of (Applicant's admitted prior art/ Morioka et al. J.P Publication 06-187712)

Regarding claim 2, Ohmi discloses an optical disk apparatus (Fig. 1) comprising: a tray means (2) for carrying an optical disk (1) in and out of the optical disk apparatus; a chucking means (top of 7) for chucking the optical disk; a laser irradiation means (11) for emitting a laser beam that is focused on the optical disk, and for activating a focusing servo; a moving means (12) for moving the laser irradiation means in a radial direction of the optical disk; a measurement means (14a) for, after the chucking means has chucked the optical disk, measuring the (warp/tilt) of the optical disk; and a control means (14) for comparing, with a first reference value (T0), the warp/tilt measured by the measurement means, and for, when the warp/tilt measured is greater than the first reference value, permitting the chucking means to release and again chuck the optical disk (see Fig. 4);

Ohmi does not expressly disclose measuring focusing drive voltages for the focusing servo at a point near a center of the optical disk and at a point near an outer edge of the optical disk, and obtaining a difference between the focusing drive voltages as the warp/tilt of the disk to be used in the comparison.

However, this feature is well known in the art and is evidenced by Park, which disclose measuring focusing drive voltages for the focusing servo at a point near a center of the optical disk and at a point near an outer edge of the optical disk, and obtaining a difference between the focusing drive voltages as to obtain the warp/tilt of the disk (see Figures 2-4; col. 5, lines 10-53).

It would have been obvious to one of an ordinary skill in the art at the time of the invention to obtain the warp/tilt of the optical disk by measuring focusing drive voltages for the focusing servo at a point near a center of the optical disk and at a point near an outer edge of the optical disk, and obtaining a difference between the focusing drive voltages in order to accurately and optimally obtaining the warp/tilt of the disk, as taught by Park.

Ohmi in combination with Park does fail to disclose taking the measurements without rotating the optical disk.

However, this feature is well known in the art and is evidenced by Applicant's admitted prior art/ Morioka et al. J.P Publication 06-187712, which discloses chucking determination by measuring a focus voltage without rotating the optical disk (See Abstract; paragraph [0024]).

It would have been obvious to one of an ordinary skill in the art at the time of the invention to measure the above focusing drive voltages without rotating the optical disk, in order to avoid damage to the optical disk caused by the mis-chucked, as taught by Applicant's admitted prior art/ Morioka et al.

Regarding claim 3, the combination outlined above further shows that in the case where the chucking means repeats the chucking (fig. 4 of Ohmi, step s61, Re-Chucking) of the optical disk, the measurement means, without rotating the optical disk, again measures the focusing drive voltages for the focusing servo at the point near the center of the optical disk and the point near the outer edge of the optical disk, and the control means compares, with the first reference value, the difference between the focusing drive voltages, and when the difference is greater than the first reference value, permits the chucking means to release the optical disk and the tray means to discharge the optical disk (Ohmi Fig. 4, step s63);

Regarding claim 5 and 6, the combination as outlined above discloses taking the focus drive voltages measurements from the near center and near outer edge of the optical disk while moving in radial direction (see Park as outlined above), but does not expressly shows regarding the feature of measuring focus drive voltages while moving means move the laser irradiation means from the outer edge to the center.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made since the affected values of the difference between the focusing drive voltages by taking the measurements while moving from outer to inner or from inner to outer are expected values to be (+) or (-) according warp/tilt of the disk and also is expected that the final position of the moving direction is either inner or outer position. Expected beneficial results are evidence of obviousness of a claimed invention, just as unexpected results are evidence of unobviousness thereof.” In re Gershon, 372 F.2d535, 538, 152 USPQ 602, 604 (CCPA 1967).

Claims 8-9, and 11-12, have limitations similar to those treated in the above rejection(s) in regard to claims 2-3 and 5-6, and are met by the references as discussed above and rejected for the same reasons of obviousness as used above.

*Allowable Subject Matter*

Claim 1 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claim 4, 7, 10 and 13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. Claims 7 and 13, would be allowable because they depend on claims 4 and 10, respectively, and would include the same allowable subject matter, however, Applicant is advised that should claim 1 be found allowable, claim 7 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof as outline above.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach or fairly suggest in the case where the measurement means measures the focusing drive voltages while the laser irradiation means is moved between the point near the center of the optical disk and the point near the outer edge and the focusing servo is actuated, the control means compares, with a second reference value, a difference between the focusing drive voltages for the measurements made by the measurement means at the two adjacent points, and when the difference between the focusing drive voltages is greater than the

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second reference value, permits the chucking means to release the optical disk and the tray means to discharge the optical disk.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L. Ortiz-Criado whose telephone number is (571) 272-7624. The examiner can normally be reached on Mon.-Thu.(12:30 pm- 9:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea L. Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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ANDREA WELLINGTON  
SUPERVISORY PATENT EXAMINER